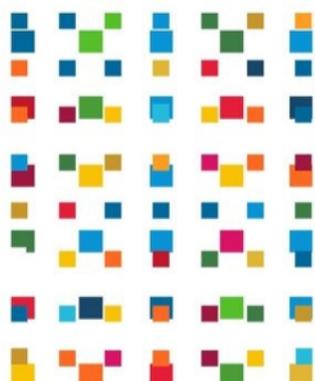


YOUNG LEADERS FOR HEALTH CONFERENCE 2019

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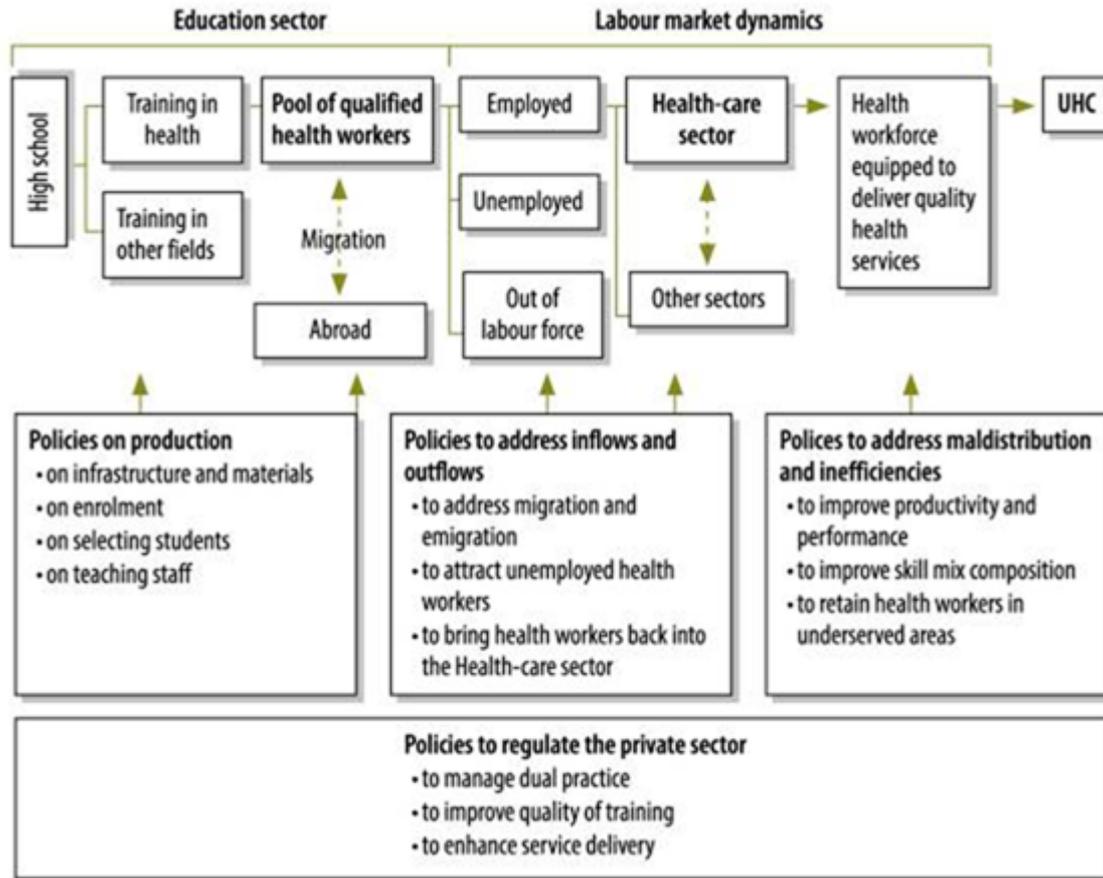


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Availability and Performance of Health Workforce.

Keywords: *Planning, recruitment, quality of health workforce.*



Source: A comprehensive health labour market framework for universal health coverage (Angelica Sousa Richard M Scheffler Jennifer Nyoni & Ties Boema).

Overview:

Health workforce refers to all persons engaged in actions whose primary focus is to enhance health. It is therefore important to note that they are an important component to a sustainable, well-functioning and performing health care system. The health workforce comprises of both clinical and non-clinical staff, inclusive of the health management teams and support staff.

An explicit planning of the “Availability and Performance of Health Workforce”, will result to a well-balanced health system with a capacity to deliver health care services. An effective health workforce planning team that has a clear understanding of the health labour (Liu, Goryakin, Maeda, Bruckner, & Scheffler, 2017) market will generate policies, frameworks, curriculum and processes that will set a balance in the demand and supply of services within healthcare and health projects in any given country. Health workforce planning includes but not limited to the admission of health workforce, distribution of the trained health workforce, deployment, capacity building and continuous professional educational development to provide tailor made health services to the entire population.

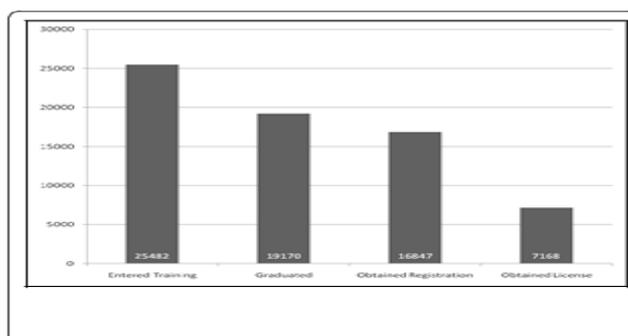
Current position:

- The economic model based on projected economic growth, demographics, and health coverage, and using health workforce data (1990–2013) provides an estimated shortage of 17.4million health workforce.
- Out of the 17.4 million health workforce, almost 2.6 million are doctors, over 9 million are nurses and midwives and 5.8 represent all other health worker cadres.
- The largest shortages of health workers are in South-East Asia at 6.9 million and Africa at 4.2 million.
- The projected global shortage of health-care workers is more than 14 million in 2030 (a decline of only 17%).
- Globally, in aggregate, using the economic model to project the future demand vis a vis the supply, by 2030 there will be a demand for 80 million health workers.
- The supply of health workers is expected to reach 65 million over the same period, resulting in a worldwide net shortage of 15 million health workers.
- The global workforce labour market projection 2030 model predicts that by the year 2030 there will be a rise in health workforce shortage to 80 million workers, double the demand as of the year 2013.

An understanding of the health labour market trends will require assessing the demand for health workers as a function of countries' capacity to create funded positions whether it is in the public or private sector. This serves as a great challenge as the health workforce are key to scaling up of essential health interventions to achieve health development targets. However, it is paradoxical, especially in the lower- and middle-income countries who are severely feeling the effects of the shortage. The paradoxical phenomenon is that there is a surplus of unemployed health workers in these countries facing acute shortage of health workforce despite the 'surpluses' of health workforce being available for employment.

Selected Statistics to emphasize on the need of a balanced health workforce:

The measuring and tracking of the health workforce including their performance is essential for decision making especially during deployment and provision of opportunities for continuous professional education. Using the most common indicator that is the number of graduates from the health and technical training institutions, a case of Uganda (data derived from the Uganda Nurses and Midwives Council) we can reflect on how health workforce planning using the pipeline process can affect the technical process and why it is important.



Graph showing the number of nurses and midwives who entered training in Uganda before 2006, graduated, obtained a council registration, and became licensed (Spero et al, 2011).

The data above indicates that; out of the 25,482 nurses and midwives who entered training before 2006, 72% graduated (19,170), 66% obtained a council registration (16,847) and 28% obtained a license to practice (7,168). This gives a snap shot view of how the pipeline process of onset planning for the health workforce to fill the gap shortage is a necessity. Using the same data, it is clear that there will be a low number of specialized health workforce to provide the skills mix required by demand as per the health labour market.

Using the graphical figure above, it is easy to identify the gaps that the health system is facing and also track the existence of the trained health workforce who are not in employment but, graduated from medical school. Additionally, it easily demonstrates the importance of being able to plan effectively and efficiently to curb the shortages of availability of trained health workforce in the health sector.

Conclusion

To be able to address the imbalances in the health workforce, it will be paramount to have a dedicated and effective health workforce characterized with the right number of health workforce, right knowledge, skills, attitudes and qualifications in order to achieve predetermined health targets. This will include considering the demographic and epidemiological transitions that drive changes in population-based health threats that the workforce must respond to.

This will help determine the skill mix needed to bridge the gap in the health workforce to achieve balance in the demand and supply of the health labour market as well as financing policies, technological advances and consumer expectations that can dramatically shift the demands of the workforce in health system.

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Investment in Human Resource for Health.



Source : https://www.who.int/hrh/HRH-SDG_infographic_Jan2016.png?ua=1

Overview

The attainment of set health targets at all government levels can only be made possible by an optimally performing health workforce with a sustained investment and equitable distribution. The idea that health economies with robust investment in HRH are driving a consumptive development sector rather than a contributory sector [1] continues to account for underperforming health systems and must be redressed. Investing in human resource for health cascades to other sectors of socio-economic development and linkage can be seen in the development index in education, employment, social security, gender empowerment and finance.

One of the 4 key objectives of the WHO HRH Global Strategy 2030 is "to align investment in human resources for health with the current and future needs of the population and of health systems, taking account of labour market dynamics and education policies; to address shortages and improve distribution of health workers, so as to enable maximum improvements in health outcomes, social welfare, employment creation and economic growth. Therefore, to meet the needs of current and future populations, substantive strategies for health workforce training, remuneration, service delivery, health program planning, staffing and equipment must be developed with adequate financial investment. Target 3(c) of the UN SDGs aims "to sustainably increase health financing and the recruitment, development, training and retention of health workforce in developing countries, especially in least developed countries

and small Island developing states [2]. This will ensure that systems exist to sustain sufficient number of quality healthcare workers to meet population demands.

Some prevailing challenges

To effectively proffer solutions to prevailing challenges in human resource for health investments, deep dive analysis into the current maladministration of health workers remuneration especially in LMICs will need to be evaluated. There is a need to share lessons learnt from successes in HRH investment and its resultant effects in high performing health systems, to explore avenues for policy transfer and adaptations.

The issues which will be highlighted here include:

Insufficient resource mobilization and allocation:

Across the globe, investment in HRH has proven to be quite lower than is often assumed [3], leading to the continuous shortage in health workforce availability. This under-investment also contributes to distribution challenges and increased labour mobility of health workers from low-resources settings. In most countries, domestic investment in HRH is very low, averaging 33.6% of government total expenditure on health.

Underwhelming political will:

On most occasions where healthcare workers have acted to demand for improved investment, it has been preceded by a seeming lack of political will from government to effectively manage and reward health workers. The needed transformation in HRH investment require systematic and institutionalized reforms which can only be possible with the right political will. National HRH policies plans and strategies as a matter of necessity need to be developed where they do not exist. Innovative policies, incentives

and regulatory frameworks need to be implemented to spur inclusive growth and intergenerational benefits. This package of labour market interventions should be coherent across the education, health, labour, international relations, immigration and trade sectors to create the necessary conditions for decent health sector jobs.

The place of investment in HRH in national health agendas:

Beyond a holistic mapping of financial requirements of the health sector, there is a need to clearly define resource mobilization strategies and plans for investment in HRH in national budgets. Traditional and innovative sources of funding for HRH investment need to be explored which will provide for improved benefit packages, social and health insurance, progressive taxation, and other incentives to health workers.

Investment across all strata of health workforce:

Investment must adopt an inclusive approach across professional cadres and gender disparities. In fact, the Global Fund's HRH Technical Brief prioritizes investments towards pre-service education and continuing professional development for primary health care providers over in-service, short-term disease-specific training for professionals [4]. Sustainability cannot be achieved if one arm of the health workforce sees itself as being marginalized.

Stimulating demand for the right number of decent jobs:

Public action which will drive labour market policies to stimulate demand for a sustainable

health workforce needs to be encouraged. Where demand for health sector jobs is insufficient, particularly in low- and middle-income countries and humanitarian settings, domestic and international investments across the health labour market are essential to upgrade existing jobs, ensure decent working conditions and stimulate the creation of new jobs.

Decent Working Conditions:

Inadequate salaries often drive health workers to take on multiple jobs, which can damage both health services and workers' welfare. Poor wages and benefits, absence of social protection and unsafe working conditions have cascaded a stress pull on the already insufficient health work force, thereby impeding productivity. A vital feature of decent work is respect for workers' rights, including their ability to influence working conditions through dialogue with health workers' organizations, and the prevention of all forms of discrimination. For example, in Spain 88% of all health-related work is unpaid. Investments and policy action to guide and stimulate job creation, when necessary, should include strategies to convert informal and unpaid work into decent

jobs and prevent decent jobs transitioning into informal jobs.

Financing and Fiscal Space:

The need for robust financial and fiscal investment in HRH cannot be overemphasized. Societal dialogue and political commitment are critical to drive appropriate macroeconomic reforms and health financing policies. In LMICs it is very unlikely that the SDGs will be realized, and even more worrisome is the existence of a seeming insufficient market demand to improve the health workforce towards achieving the SDGs. Adequate funding from domestic and international sources, public and private where appropriate, and broad-based health financing reforms are needed. Investing in the right skills, decent working conditions and an appropriate number of health workers is necessary. Most countries can secure sustainable health financing, assuming continuing growth in public revenue, with necessary priority to the health workforce. The impact of public-private partnerships in the health sector has been demonstrated severally, thus, public policies which attract co-investments by the private sector should be scaled up.

Conclusion

HRH investments require collective action of stakeholders at all levels of service delivery, governance and decision making. Priority in support could focus on fragile and developing countries which will also address the current wave of health workforce migration.

Facts Sheet - Investment in Human Resource for Health

Why we need to invest in HRH:

- The Lancet Commission on Investing in Health reported that ¼ of Economic Growth reported in 2000 – 2011 in LMICs resulted from improvement in health investments [5].
- Health is estimated to produce a 9 to 1 return on investment.
- In developed economies, it is estimated that every 1 dollar invested in the health sector results in additional US\$0.77 contribution to economic growth as a result of induced and indirect effects¹.
- Failure to invest in and reform the global supply of qualified health workers to meet both current and projected needs will result in the continuation of inefficiencies in health care, such

as the avoidable annual cost to health care of US\$ 500 billion caused by the lack of responsible use of medicines.

- Across the OECD countries, employment in health and social work grew by 48% between 2000 and 2014, while jobs in industry and agriculture declined. It is hoped that demand for health services will continue to increase, creating millions of new jobs.¹
- Health and social workers constituted around 11% of total employment for OECD countries in 2014, rising from approximately 9% in 2000 [6].
- Estimates by Statistics Norway suggest that up to 38% of Norway's workforce might work within the health sector by 2060 [1].
- China, with a current health workforce of nearly 10 million, shows shortages and slow growth according to global and income-group norms [7]. A 2016 report suggests that health care will generate 7.5 million direct job opportunities in India by 2022 [8].
- An additional 2% GDP investment into education and health and social services could increase overall employment rates by between 2.4 and 6.1 percentage points [9]. It is estimated that women will take between 59% and 70% of the jobs created by such investment, increasing the rate of women's employment by 3.3% to 8.2% [5].
- Training Health workers in preparedness for humanitarian crises and emergency response: Many health and emergency aid workers in complex emergency settings have had little or no training before their deployment. During the Ebola outbreak, shortages in human, medical and material resources led to major breaches in medical protocols. Fatality rates among health workers were markedly higher than for the general population in all three countries: 1.45% in Guinea, 8.07% in Liberia and 6.85% in Sierra Leone [10].

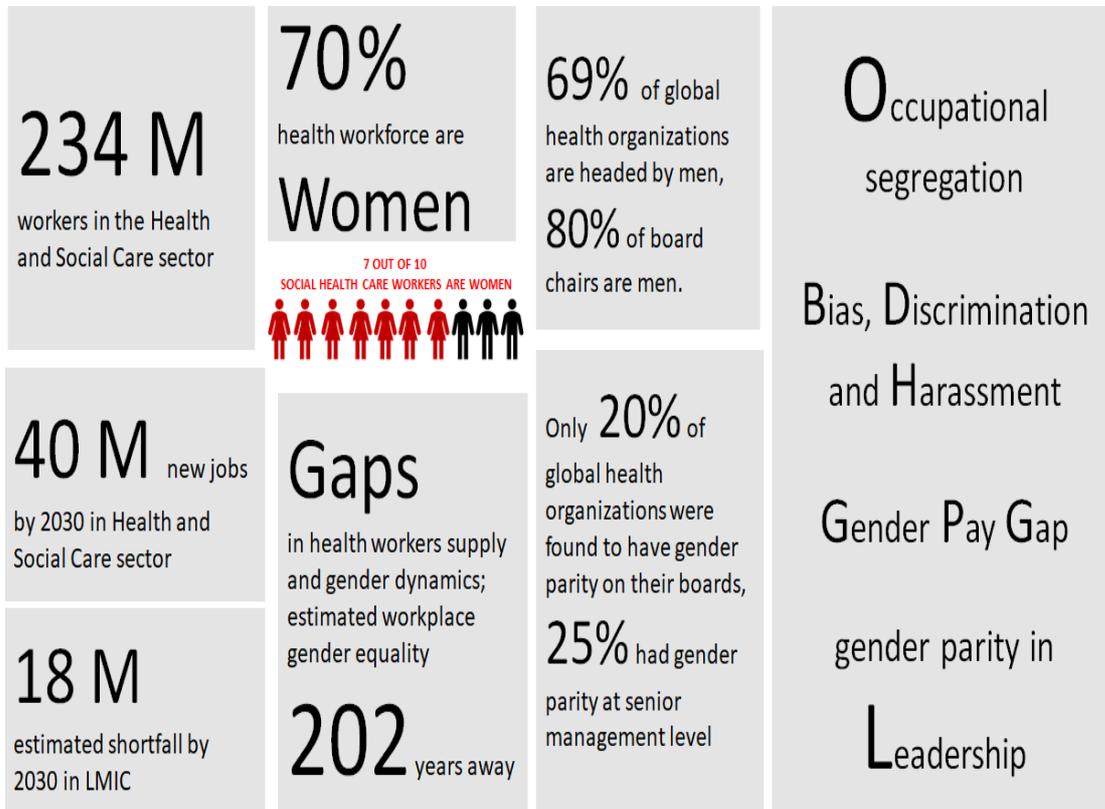
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Health Workforce Distribution.

Inequality across Gender, Geographical distribution at global, national and sub-national health systems. Role of Community Health Extension Workers and other community stakeholders (such as local leaders, religious organizations, schools, security agencies etc.) in Health Workforce and healthcare delivery.



Source: WHO Delivered by Women, Led by Men: A Gender and Equity Analysis of the Global Health and Social Workforce Human Resources for Health Observer - Issue No. 24 <https://www.who.int/hrh/resources/health-observer24/en/>

Overview:

The health and social sector, with its 234 million workers, is one of the biggest and fastest growing employers in the world.^{1,2} According to the WHO and the World Bank, changes in world demographics and increasing health care demands are projected to lead to the creation of 80 million new jobs in health care by 2030.³ While 40 million new jobs are likely to be created mainly in high and middle income settings, a shortage of 18 million health workers, primarily in low-resource settings is predicted, which will hinder the accomplishment of universal health coverage.⁴

The major challenge, however, is not just the shortage of human resources for health (HRH), but the geographical distribution at global, national and sub-national health systems, inequality across gender in health workforce, and potential role of community health extension workers and other community stakeholders as a part of health workforce.

Health workforce distribution is uneven across the globe. Countries with the lowest relative need have the highest numbers of health workers, while those with the greatest burden of diseases have much smaller health workforce. The African Region suffers more than 22% of the global burden of disease but, has access to only 3% of health workers and less than 1% of the world's financial resources. More than 80% of countries in lower-income settings (LI) have fewer than 10 medical doctors and fewer than 40 nursing and midwifery personnel per 10,000 populations.^{5,6}

Women in the Health Workforce

The representation of women as the main providers of health continues to grow to 70% as women deliver health care to around 5 billion people globally and contribute US\$ 3 trillion annually to global health.^{2,5} However, inequities and gender-based discrimination is widespread and deep-rooted in the forms of occupational segregation, gender pay-gap, leadership parity, bias and sexual harassment. Women mostly have lower paid jobs and majority of the professions are given lower social value and status. The global pay gap in health sector is 26% higher than average.^{2,7} Women hold only 25% leadership roles due to stereotypes, discrimination, power imbalance and social privileges. 20% of global health organizations were found to have gender parity on their boards, and 25% had gender parity at senior management level. Large percentage of women in health workforce face bias and discrimination. Female health workers face not only burden of sexual harassment, but diverse challenges causing harm to their daily lives, as well as their physical and mental health. Not many countries have laws or social protection against gender discrimination at work.² As women are the majority of the health workforce, there is an urgency to mitigate gaps based on gender.

Community Health Workers (CHW)

A valuable part of health workforce, community health workers (CHW) have been successful across the globe in countries like Brazil, South Africa, Bangladesh, Indonesia among others in providing primary health care more extensively and particularly in low income and rural settings. They have different local names for example, Lady Health Workers of Pakistan and CHEW in Ethiopia, but all CHWs are members of the community who are trained to provide and promote primary health care services at their community and household level and connect them to available health facilities. This approach provides an opportunity to engage many local stakeholders in the local public health issues and connect them to other sub-national and national stakeholders to collaborate in creating a sustainable chain of health care delivery. Despite the wide recognition and evidence of their positive potential, the support for CHWs and their integration into health systems and communities is not uniform.⁸ CHWs are not always recognized as formal HRH, but only small scale health programs are highly dependent on donor funding.⁹ This leads to unclear roles, education and career pathways; lack of certification impeding credibility of the community health workforce ultimately undermining their impact on health status of the community they work for.

Future Directions (Addressing the Challenges)

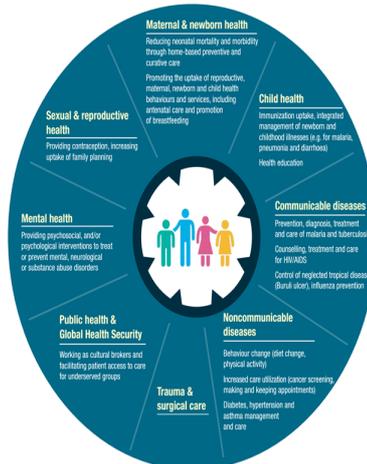
In 2014 the World Health Assembly adopted a resolution to create a global strategy for human resources for health (HRH) to renew its commitment towards universal health coverage. The Global Strategy on Human Resources for Health: Workforce 2030 was developed two years later with focus on adequate investments to strengthen health systems, and the implementation of effective policies at national, regional and global levels. The progress made was summarized in a report by the director general in the 72nd WHA. The work on national health workforce accounts has been particularly successful and with the support of the Global Health Workforce Network's data and evidence hub and linkages to the Health Data Collaborative. There has been an increase of 24% for physicians, nursing and midwifery personnel data, and at least five years of data are available for 50% more countries. Moreover, a 10% global increase

in stock of health workers, and a 13.1 % increase in Africa, from 2013 to recent records indicates substantial increase in jobs created in the health sector.¹⁰

There is increased emphasis on gender equality in recent years. The WHO Global Strategy on Human Resources for Health: Workforce 2030, the UN High Level Commission on Health Employment and Economic Growth, the Global Health 50/50 Reports, Women in Global Health, and #LancetWomen, all aim to explore women in leadership roles and inequalities faced by women and accomplishing gender parity in the health workforce. Recently, Zeinali et. al.¹¹ discuss whether parity is enough in a commentary. In addition to gender-mainstreaming practices, gender-inclusive and transformative policies, intersectional approaches which focuses on the associations and interactions between different factors like socioeconomic status, sex, gender, race/ethnicity, age, disability/ability, migration status, or religion across multiple levels of society, and how they create complex social identities are being explored and advocated for.¹¹

The WHO guidelines on health policy and system support to optimize community health worker programs from 2018 also emphasizes the potential of community health workers (CHWs) as part of extensive efforts to strengthen primary health care and the health workforce.¹² This is relevant and applicable for all kinds of community-based health extension workers and is a step forward to improve design, implementation and evaluation of performances of CHW initiatives contributing towards the goal of universal health coverage. The success of the guideline is dependent on its incorporation by member states in national policy frameworks of the member states.¹⁰ A renewed focus and increases effective support, by national and international initiatives, on defining the roles of community health workers to be considered as the same of other occupations in the health and social sector will encourage long-term sustainability, distribution of health workforce leading to universal health coverage, especially in low and middle income settings.

Primary health care services for which there is some evidence of CHW effectiveness



Source: WHO guideline on health policy and system support to optimize community health worker programmes. Geneva: the World Health Organization, 2018. Licence: CC BY-NC-SA 3.0 IGO.

Facts Sheet ^{5,6}

- Over 30% of WHO Member States report to have less than 10 medical doctors per 10 000.
- Over 60% of WHO Member States report to have less than 40 nursing and midwifery personnel per 10 000 (about 25% report to have less than 10).

- Nurses and midwives constitute more than 50% of the national health workforce in many countries. Yet, their shortage will reduce from the current 9 million to 7.6 million by global estimates, but the unavailability in the African and Eastern Mediterranean Regions will worsen.
- The African, Eastern Mediterranean and South-East Asia WHO regions account for 47% of the global population, yet only 17% of licensed surgeons.
- Latest reports (2017) of density of medical doctors in WHO regions is lowest in AFR, SEAR and EMR with 2.8, 7.4 and 9.9 and highest in EUR with 33.8 per 10,000.
- According to World Bank income group LI and LMI settings have 3.1 and 7.5 medical doctors per 10,000 population compared to HI of 30.4. The nursing and midwifery personnel density is 8.5 and 18.9 in LI and LMI, while 85.6 in HI setting per 10,000.
- Global Density and Mobility: The number of migrant doctors and nurses working in OECD countries has increased by 60% over the past 10 years (from 1,130,068 to 1,807,948).
- Only 6% of community health nursing professionals studied were performing roles in health promotion, disease prevention and rehabilitative care.

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Digitization and Automation

The Impact of the digital revolution on Health Workforce, Preparedness of Health Workforce for future advancement of digital and automated technologies in health care.



Source: <https://www.i-scoop.eu/digital-transformation/healthcare-industry/>

Overview

“Some will look at the years ahead and see a glorious nirvana in which the messy and inefficient services of today are transformed into predictive, coordinated and personalised care. Others will see a dystopia of doctors becoming slaves to algorithms and patients drowning in a sea of data and additional expectations. Both are possible...”

- Nuffield Trust, 2016 (1)

Technology is increasingly playing an important role in our lives; increasing connectivity, efficiency and personalisation in all aspects of our lives. Reports suggest, however, that health care is at least a decade behind other industries in the use of information technology. In recent years, this has begun to change and investments and interest from private and public organisations have led to a speed up of developments in the area. So, what can this mean for a global healthcare workforce that is currently on course to be running at a deficit of 15 million workers by 2030 (1)? Could digital health reduce some of the burden on workers, at the same time as providing higher quality levels of care to patients worldwide? And how might the workforce be best prepared to engage with this new eco-system?

Digital health, also known as mHealth or e-health, is a broad term that describes the use of any technology used for prevention, diagnosis and treatment of diseases, as well as patient monitoring and health management. The Nuffield Trust describe a potential future digital health ecosystem encompassing all aspects of the sector, with the patient or service user at its centre, surrounded by the patient facing technologies that provide them with opportunities to manage their health and engage with health care providers. These include wearable devices, apps, online communities and patient portals. Next are the technologies that provide tools for healthcare professionals. As well as, decision support, the capacity to access other professionals' expertise, tools to prioritise and manage their clinical workload and tools to help them provide more accurate diagnoses, and offer more personalised, informed care. Lastly, there are the technologies that support organisations, including tools for business process support, predictive analytics, flow management and e-rostering, which give new resource and clinical management capabilities to health care providers. Through this new eco-system, medical treatments moves from the clinics and to the patients and health care workers daily life regardless of where they are in the world.

Whilst the future is optimistic, there are a number of challenges to implementation, and it's important to note that digital technologies will not deliver improvements in productivity on their own. Indeed, if not careful, they can create inefficiencies and staff frustration and even threaten the quality of care. On the next page are some examples of digital success for the workforce, as well as key learnings for implementation.

Current situation

Examples of proven benefits to the workforce:

- Remote data access tools like MIA Maternity by Isosec42 – a tool for community midwives ensures that all patient information is up to date and available to all members of the team remotely. Midwives save 5 hours a week on average (Isosec and Imperial College Healthcare NHS Trust, 2015).
- Tele-ICUs (receive support from a remote critical care team) can be associated with preventing intensivist and nurse burnouts and onset of posttraumatic stress (Kumar and others, 2013) and a decrease in the turnover of registered nurses – in one centre it decreased by 56% (Goran, 2010).
- E-rostering tools like Allocate Software show managers in real time, which tasks have been completed, how long they have taken, where they have taken place and by which member of staff. They can then reallocate the workforce in real time, based on workload and demand.
- Refugee First Response Centre (RFRC) uses Cisco equipment to provide live video translation services during medical visits in a repurposed shipping container. The mobile health clinic connects doctors and patients with 750 live interpreters that are fluent in more than 50 languages. RFRC completed over 5,000 medical

exams with liver interpretation within its first five months.

Learnings so far:

1. Design technologies with the people who are going to use them. Health professionals sometimes feel threatened by new technologies and refuse to engage. However, the digital transformation should be seen as a tool to complement the professional's service and not as a replacement, as well as helping them to optimize their time. Involving workers in the design of the tool and making the tool adaptive and personalised help to mitigate the risk of non-engagement.
2. Keep input systems simple and user friendly. Poorly designed systems have led to significant increases in time spent on data entry and multiple unhelpful alerts – with some research showing that health care professionals spend over 40% of their time on computers compared with just 12% with patients (Block and others, 2013). Simplifying and integrating the data capture across technologies helps to reduce the burden.
3. Consider how work is currently being done first. When implementing e-rostering technology, think about how the workforce is already working – particularly the 'informal, process-oriented information exchange and communication' that take place across staff (Gurses and others, 2006). If the technology is adaptable it can support changes in how teams work over time.
4. Be prepared for frequent changes. Technology changes fast. Designing technologies on open-source platforms increases the potential for integration and makes later iterations and edits more feasible.
5. Take data protection seriously.

Fact sheet - Digital health in numbers.

- There are over 100,000 mHealth apps available, with over 43,000 on iTunes alone.
- 500 million people will use a smartphone health apps this year (3)
- The health app market revenue was projected to grow to USD \$26 billion by the end of 2017 (3).
- More than 75% of all patients expect to use digital services in the future.
- Digital technologies are expected to affect up to 45% of all current jobs in the next ten years (5)
- Hospital expenditures on analytics are anticipated to reach USD \$18.7 billion by 2020, up from USD \$5.8 billion in 2015, as hospitals focus on quality and cost reduction (5).
- 40% of healthcare providers worldwide experienced a cyber-attack in 2013 (3).
- Currently, 20 of the 22 countries either provide no digital health training to health professionals as part of their pre-service training requirements or only do so for less than 25% of health professionals (6).
- China is leading the way in telemedicine, with over 74% of doctors offering digital consultations to remote patients (6).

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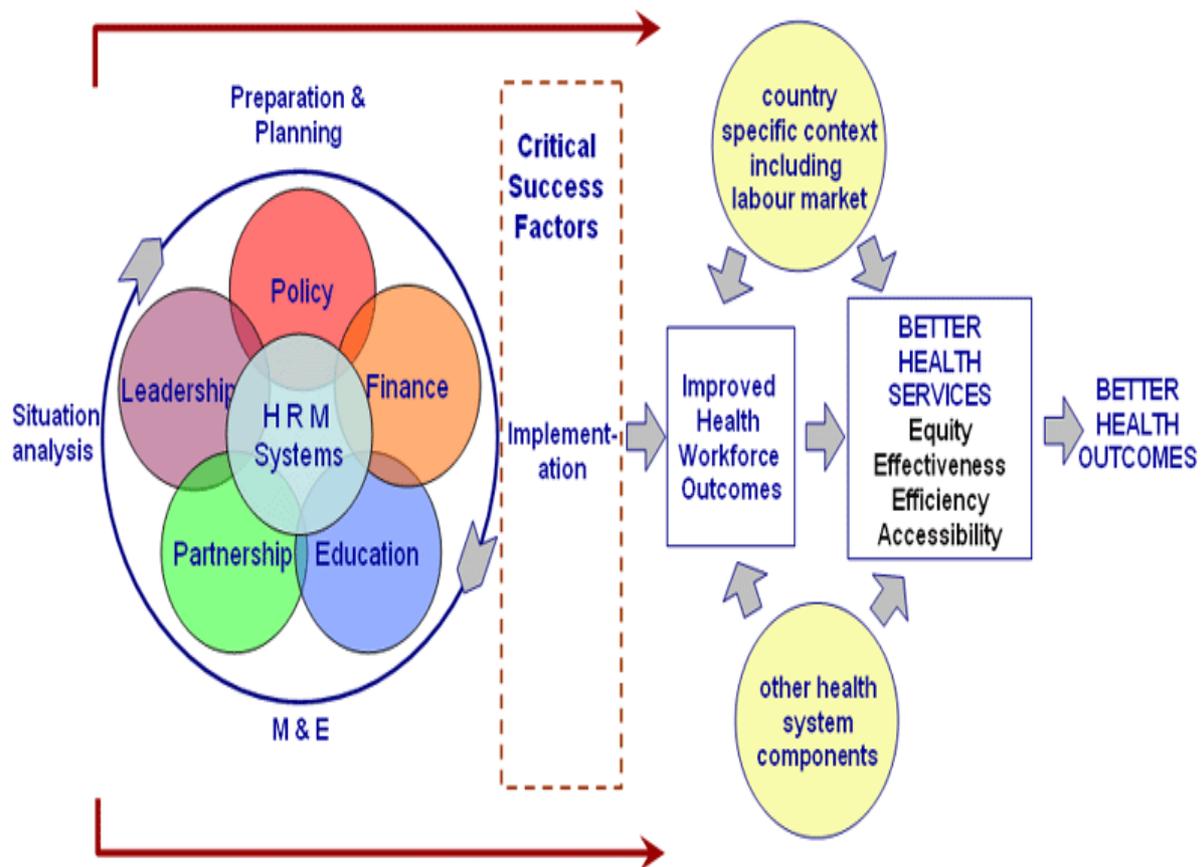
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Strategies for assessment, monitoring, evaluation and policy implementation

Keywords: strengthening institutions, supervision, managing migration, retirement, legislation, advocacy.



Source : https://www.who.int/hrh/tools/HRH_action_framework.gif?ua=1

While the challenges faced by the global health workforce requires a multi-stakeholder approach to solve, there are several issues that can be tackled via policy initiatives at the national level. The four main issues

that are the subject of policy implementation include worker migration/imbalance, education, inequality, and retention/burnout.

Identified Challenges:

Worker migration and imbalance.

The issue that many countries have used policies to address is worker migration and worker imbalance in rural vs. urban areas. For example, there have been significant increases in emigration from Central and Eastern Europe to Western Europe following the reduction of mobility barriers.³ Additionally, in every OECD country the number of doctors per capita tends to be much lower in rural and deprived urban areas.⁴ Furthermore, in many African and South and Central American countries there are severe shortages due to “brain drain”.⁵ Unfortunately, most national policies have had uneven success at achieving better geographic distribution.¹

Education.

The second issue that has been addressed via policy initiatives is that of health workforce education and training. There is a general consensus that there is currently a waste of human capital occurring in the international health workforce. According to the 2011-12 PIAAC survey; 50% of doctors and 40% of nurses reported being under-skilled for some tasks.⁴

Inequality.

The third issue, inequality in the workforce, has not been a top policy priority until more recently for most countries. Generally speaking, racial and ethnic disparities in education, hiring, and policy contribute to the ongoing issue of a lack of minorities in the health workforce.⁵ Another example of inequality that demonstrates the importance of tackling the issue is the fact that women make up 70% of the global health workforce but only hold 25% of seniority roles.² With the growing need for a stable and efficient health workforce, inequality can no longer be ignored.

Retention and burnout.

Finally, there is the issue of retention and burnout. For example, the economic stability of a country plays a large role in retention of health workers.¹ Additionally, working times, pay raises, and retirement policies are highly varied depending on country, employer, regulations, etc.⁵ These variations have led to health workers switching careers, dropping out of the workforce entirely, or retiring earlier. Each of these actions results in a catch-22 of less workers, an inefficient and overburdened workforce, and higher rates of burnout and lower retention rates.

Current strategies:

With the four above-mentioned challenges in mind, as well as the looming 18 million health workers deficit projected by 2030, many countries have already begun to enact policies to strengthen their health workforce. There is an international consensus that clear legislative frameworks, capable regulatory bodies, and strong linkages between education institutions and regulatory bodies are necessary to ensure a strong and stable international health workforce.⁵

There are several examples of these policy strategies. For example, in the last few years many OECD countries have targeted immigration. “40% of the countries that reported to the ‘WHO Global Code of

Practice on the International Recruitment of Health Personnel' have introduced or are developing national laws and policies, consistent with the WHO health worker migration code".⁵ The goal is not to stifle immigration, but to help steer it into countries and areas that have the highest need. Additionally, many countries are trying to attract foreign physicians to underserved areas. For example, "Australia steers international medical graduates and foreign trained physicians into underserved areas, using regulations to impose practice in designated areas for a number of years."⁴

Furthermore, countries have begun using policy to prolong the working lives of physicians and nurses through the introduction of healthcare restructuring and incentives. For example, long-term care reforms have been introduced to reduce the burden on healthcare workers with the ageing population. These reforms have been successful in the Netherlands, Japan, and Pakistan.¹ Another strategy that has become popular is the use of incentive.

At the governmental and organizational level these incentives range from increasing salaries and improving/updating working conditions to incentives designed to encourage the up-take of specialties that are in shortage.⁴ Finally, studies show that social policies such as parental leave, maternity leave, and subsidized child care influence the career choices of men and women and are therefore having a strong impact on gender equality in healthcare.²

After immigration, the secondary target of policy initiatives has been on education reform. Specifically, an increase in overall intake into medical education and training. Many medical institutions and educational programs have been required to adjust admissions quotas to better fit the workforce needs. For example, Japan has developed student selection quotas that ensure enough doctors for each prefecture.⁴ A 2011 study showed 89% of graduates stayed in their prefecture under the quota scheme.⁴ Another method used to increase the number of health workers is that some countries are giving priority to workers who can be educated and trained quickly and at a modest cost but can provide a wide range of services needed by the ageing population.¹ Finally, education reform has also included the use of, "scholarships or loan repayment for service, dissemination of information on areas of need, promotion of educational opportunities to those most likely to make careers in shortage areas, and reimbursement incentives for practice in underserved areas."¹

Conclusion

Have these policy implementations been successful? In some cases, yes, and in others no. Research shows that investment in the health workforce is lower than is often assumed (on average 33.6% of total government expenditure).¹ Additionally, globally, 20–40% of all health spending is wasted, and health workforce inefficiencies are responsible for a substantial proportion.¹ Furthermore, interprofessional education is still not fully integrated into current educational and continuous professional development programs, there still remains a significant gender pay gap in most countries, and women's employment rights in many countries are not protected by legislation in critical areas.^{2,3} These are just a few of the shortfalls that have not successfully been addressed.

Where do we go from here? The WHO, UN, and other international bodies have recommended several policies priorities for countries to enact to address the current challenges of the health workforce; a

renewed focus on the target SDGs; 3,4,5 and 8, optimize the workforce, meet population needs, build partnerships, and monitoring and accountability. SDGs 3,4,5 and 8 make up the cornerstone of universal healthcare and therefore are essential consideration for future policy initiatives.

Countries also need policies designed to optimize the health workforce. This can be done through more efficient uses of human capital and through significant education policy reform. In addition, future policies need to meet population needs. For example, countries could increase levels of financial expenditure on the health workforce aimed at job creation or increase substitutions of some doctors by extending the role of other healthcare providers in areas where there are shortages.^{1,3,5}

Moreover, it is essential that building partnerships become a top priority for countries. This includes the implementation of interdisciplinary approaches at the national and local levels of government and cross-country cooperation. Finally, countries need to put into practice effective monitoring and accountability measures in an effort to generate social and policy dialogue at all levels of government and better health workforce financing policies. The key question is: Should governments invest more in building the public health workforce to ensure continued and effective functioning of health systems?

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